MARINE PROTECTION, RESEARCH, AND SANCTUARIES **ACT OF 1972**

AUTHORIZATION—FISCAL YEAR 1978

MAY 20, 1977.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. TEAGUE, from the Committee on Science and Technology, submitted the following

REPORT

[To accompany H.R. 4297]

[Including Cost Estimate of the Congressional Budget Office]

The Committee on Science and Technology, to whom was sequenstially referred (for consideration of such portions of section 2 of the bill as fall within that Committee's jurisdiction) the bill (H.R. 4297) to amend the Marine Protection, Research, and Sanctuaries Act of 1972 (P.L. 92-532) to authorize appropriations to carry out the provisions of such act for fiscal year 1978, having considered the same, report favorably thereon with amendment and recommend that the bill do pass.

The amendment is: on line 6 of page 2 delete "\$6,000,000" and add "\$6,500,000". The purpose of the amendment is to increase the authorization to allow for comprehensive, coordinated monitoring and modelling of the effects of ocean dumping in the New York Bight.

1. Purpose of the Legislation

The purpose of H.R. 4297 is to amend the Marine Protection, Research, and Sanctuaries Act of 1972 to authorize funds for the act for fiscal year 1978.

2. Commerce Actions

The jurisdiction of the Committee on Science and Technology includes "environmental research and development" under Rule X, aclause 1(r) (10) of the Rules of the House of Representatives. Title II of the Marine Protection Research and Sanctuaries Act of 1972 Edeals with such research and development and section 2 of the bill reported, H.R. 4297, authorizes funds to carry out that title for fiscal year 1978. Thus the Committee has considered activities and funding

pertinent to title II.

Hearings were held on March 3, 1977, before the Subcommittee on the Environment and the Atmosphere at which time the National Oceanic and Atmospheric Administration presented their proposed fiscal year 1978 budget for research on effects of ocean dumping. In its March 15 estimate to the House Budget Committee, the Committee on Science and Technology recommended a fiscal year 1978 authorization of \$5.1 million for NOAA's ocean dumping research. This bill, as amended, authorizes \$6,500,000 for research and development under title II for fiscal year 1978.

The Science Committee requested sequential referral of H.R. 4297 after it was ordered reported by the Merchant Marine and Fisheries Committee, and on May 16 the bill was sequentially referred until May 20, 1977 to the Committee on Science and Technology. On May 19, 1977, the bill was ordered reported by the full Science Committee

with amendment.

3. Committee Recommendations

The committee favorably reported the bill by a unanimous voice vote and recommends its enactment.

4. BACKGROUND DISCUSSION

The report of the Committee on Merchant Marine and Fisheries contains a broader and more comprehensive discussion of this legislation (H. Rept. No. 95-325). This Committee sought and received sequential referral of the bill pursuant to its jurisdiction over "environmental research and development" (under Rule X, clause 1(r)(10) of the Rules of the House of Representatives).

The Marine Protection, Research, and Sanctuaries Act of 1972 (Public Law 92-532), as amended, is written in three titles. Title I deals with the regulation of ocean dumping by EPA and is not dealt with here. (However, it should be noted that the EPA research program to support title I is under the jurisdiction of the Committee on Science, and Technology and is authorized for fiscal year 1978 in H.R. 5101 which passed the House on April 9, 1977.) Title II deals primarily with the research carried out in the Department of Commerce, specifically in NOAA, to support the regulatory intent of title I. Title III provides for the designation and protection of marine sanctuaries.

The Merchant Marine and Fisheries Committee report summarizes

the substantive provisions of title II:

TITLE II

Section 201 directs the Secretary of Commerce, in cooperation with the USCG and the EPA, to "initiate a comprehensive and continuing program of monitoring and research regarding the effects" of ocean dumping and to report not less than annually on these activities. The Commerce Department submitted its third such report on August 22. 1976.

on Section 202 directs the Secretary of Commerce to conduct research with respect to the possible long-range effects of pollution, overfishing, and man-induced changes of oceans' ecosystems. A report is required con activities carried out pursuant to this section in January of each year. The third such report was submitted on September 20, 1976.

Explain Section 203 directs Commerce to assist and coordinate research to minimize or end all dumping by October 23, 1977. This includes the

, research on alternatives to ocean dumping.

The research most essential under this section is research which examines the degree of harmful effects of different waste materials—under varying oceanic conditions as well as research for alternative methods of disposal. These research tasks must be coordinated between EPA and NOAA, and should include the development of methods to fevaluate tradeoffs between disposal alternatives.

5. Explanation of the Bill

The bill amends the Marine Protection Research and Sanctuaries Act of 1972 (33 U.S.C. 1420, et seq.) to authorize appropriations for fiscal year 1978. The bill simply adds the amounts authorized for fiscal year 1978 and makes conforming changes. (See the section on "Changes in existing law made by the bill, as reported.") Another provision of the bill deals with regulatory matters—it specifically bans the dumping of sewage sludge after 1981.

However, the only provision of concern to this committee at this time is the authorization for title II, the research title of the MPRSA. The authorization was for \$5.6 million in fiscal year 1977 and the existing law is amended to authorize \$6.5 million in fiscal year 1978.

6. Committee Views

The Committee on Science and Technology gained jurisdiction during the 94th Congress over environmental research and development. The committee has historically been very concerned with research and development generally. Environmental research and development on ocean-related topics is of special concern, including research on both short-term and long-term effects of ocean dumping. Given the present strain on marine fisheries resources, the present load of contaminants flowing into the oceans, the interest in deep seabed mining, and increasing exploitation of other ocean resources, it is imperative that we understand the effects of these uses of the oceans. At present, we do not have the data base to predict the impact of ocean dumping on the marine ecosystem.

The matters under discussion in this report are primarily concerned with ocean dumping research. Because the research being discussed is conducted in part in support of ocean dumping regulation, it is necessary to consider regulatory policy to some extent since environmental research and the regulatory aspects are not totally separable. The research should be applicable to both the short-term and long-term na-

tional goals in this important environmental area.

Hearings held before this committee, other reports, and general interaction with the ocean research community have uncovered many specific gaps in our understanding of the effects of ocean dumping and

a related need for specific research to fill these gaps. However, the major recommendation of this committee deals with the obvious lack of a broad national ocean policy which understandably results in a lack of coordination, direction, and sense of priority in ocean dumping research. We recommend development of a national oceans policy, and its execution, realizing that this recommendation is not original and that it is much easier to suggest than to implement. A broad policy, developed with input from this and other congressional committees, would provide a framework to guide the management of ocean research.

There is presently no management overview of ocean dumping research under the Marine Protection, Research, and Sanctuaries Act. Four agencies (National Oceanic and Atmospheric Administration, Environmental Protection Agency, Corps of Engineers, Coast Guard) have some involvement in this issue and the lack of coordination and priorities leads to an array of approaches. The responsibility for carrying out the authority in section 203 (which deals with research on alternatives to ocean dumping) has been tossed between NOAA and EPA with neither agency assuming an aggressive approach to and actually pursuing development of alternatives to ocean dumping.

A relatively small coordinating staff located in the Executive Office of the President, if given the appropriate responsibilities, could achieve such a management function for all ocean research. This function would be appropriate for the Council on Environmental Quality, the Office of Science and Technology Policy, or even as a visible and explicit function of the Office of Management and Budget. The staff could be given control over ocean research activities of the various agencies in a manner similar to the authorization function of a congressional legislative committee. The staff would need to have authority to conduct oversight investigations in order to assemble upto-date information on the adequacy and direction of the oceans programs being carried out in the mission agencies. If such a function were instituted and in operation, there would be a reviewable policy against which actions could be measured and which could be corrected when necessary. Therefore, the establishment of an Office of Ocean Affairs in the Executive Office with authority (i) to review and coordinate ocean-related activities and budgets, and (ii) to oversee ocean-related activities in the Federal agencies should be considered. It should have an adjunct Oceans Affairs Advisory Council, composed of persons outside the Federal Government, and should make continuing use of interagency task forces for specific planning or evaluation of projects.

There follow four relatively general recommendations dealing with ocean-dumping research. The committee realizes that although the implementation of these recommendations requires specific research projects, the detailed project planning can best be accomplished by coordination and cooperation among the agencies involved. The committee recommends:

(1) Research to improve the basic understanding of the dynamics of oceans including biology, ocean chemistry, currents, seasonal changes, ocean-atmosphere interactions, benthic-water column interactions, et cetera. Ocean dumping could be viewed as a perturbation of a well understood dynamic system.

(2) Research on and development of indicies of environmental quality to measure the effects of ocean dumping. Such new methods to measure and predict the impact of dumping may include new bioassay tests.

¹(3) A long-term program of baseline studies to establish points of reference against which to measure trends, changes, and natural

fluctuations.

(4) Information on basic processes of pollutants and their interactions with the environment so that pollution toxicity can be

predicted.

The committee strongly supports the research and development work that is currently being undertaken by the agencies and would like to see an expanded program in the ocean dumping area. For this reason the committee agrees with the Merchant Marine and Fisheries Committee in its recommendation to increase the funding rather than having the agencies internally reprogram funds for this research. The committee notes that NOAA first requested and was first given an appropriation for ocean dumping research in fiscal year 1977. The following table indicates that no funds had been appropriated before that time. The committee hopes that ocean dumping research and development will have an even higher priority in NOAA in the future.

The committee amended the bill to provide an increase of \$500,000 to assure that resources are available for research, development and ultimately demonstration of advanced technology for comprehensive monitoring and modelling of ocean dumping effects in the New York

Bight.

Expanded water quality monitoring, designed to predict on a realtime basis the effect, fate and distribution of pollutants which might adversely impact the use of ocean waters adjacent to, and offshore of, the Long Island and New Jersey coasts, should be conducted in the New York Bight. The environmental episodes of 1976 which included fish kills, oil and toxic chemical spills, and the closure of public beaches, demonstrates the need to identify the sources, as well as the

magnitude of these causative pollutants.

The National Oceanic and Atmospheric Administration serves as the lead agency in coordinating the monitoring and response activities of all organizations involved in research and other scientific studies of the New York Bight. Federal agencies involved will include, but not necessarily be limited to, the Marine Ecosystem Analysis (MESA) Program and other agencies within NOAA, NASA, Corps of Engineers, FDA, EPA, and the United States Coast Guard. Expertise available from academic, business and private research organizations will also be used to support these episodic monitoring activities. Recognizing NOAA's lead agency role, the committee feels strongly that NOAA should consult closely with the other agencies on the order of research priorities for this additional funding recognizing the appropriate roles of the other federal agencies in the comprehensive monitoring program.

Finally, the Committee on Science and Technology has found in the past that support for environmental research, especially long-term projects, has been inadequate to support regulatory programs; this

appears to be another example.

The committee has a keen interest in oceanic research efforts, specifically ocean dumping, and plans to continue its oversight of this research.

National Occanic and Atmospheric Administration, title II, authorizations and appropriations, 1973-77

[In thousands of dollars]	
	1.4
Authorization: Fiscal year 1973	6,000
Fiscal year 1974	6,000
Fiscal Year 1975	
Fiscal year 1976	6,000
Transition quarter	
Fiscal year 1977	
Proposed fiscal year 1978	
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Fiscal year 1977	

7. Oversight Activities

Pursuant to clause 2(1)(3)(A), rule XI, and under the authority of rule X, clause 2(b)(1) and clause (3)(f), of the Rules of the House of Representatives, the following statement on oversight activities is made:

The Subcommittee on the Environment and the Atmosphere of the Committee on Science and Technology held hearings on ocean dumping research during the 94th Congress. The committee's recommendations based on those hearings are contained in the "Committee Views" section of this report.

8. Oversight Findings and Recommendations by the Committee on Government Operations

Pursuant to rule X, clause 2(b)(2), of the Rules of the House of Representatives, the following statement is made: No report of oversight findings or recommendations of the Committee on Governments Operations has been received by the committee as of May 19, 1977.

9. Congressional Budget Act Information

Pursuant to rule XI, clause 2(1)(3), of the Rules of the House of Representatives, the following statement is made with reference to information required under section 308(a) of the Congressional Budget Act of 1974: The bill does not provide for new budget authority or new or increased tax expenditures.

¹ The Environmental Effects of Dumping in the Oceans and Great Lakes. Hearings before the Subcommittee on the Environment and the Atmosphere of the Committee on Science and Technology, U.S. House of Representatives, 94th Cong., 1st sess., No. 55.

10. Estimate and Comparison, Congressional Budget Office

Pursuant to rule XI, clause 2(1)(3), of the Rules of the House of Representatives, the following estimate and comparison was prepared by the Congressional Budget Office, as required by section 403 of the Congressional Budget Act of 1974:

Congressional Budget Office, U.S. Congress, Washington, D.C., May 19, 1977.

Hon. OLIN E. TEAGUE, Chairman, Committee on Science and Technology, U.S. House of Representatives, Washington, D.C.

Dear Mr. Chairman: Pursuant to section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has prepared the attached cost estimate for H.R. 4297, a bill to amend the Marine Protection, Research, and Sanctuaries Act of 1972 to authorize appropriations to carry out the provisions of such act for fiscal year 1978.

Should the committee so desire, we would be pleased to provide fur-

ther details on the attached cost estimate.

Sincerely,

JAMES BLUM (For Alice M. Rivlin, Director).

CONGRESSIONAL BUDGET OFFICE—COST ESTIMATE

MAY 19, 1977.

1. Bill number: H.R. 4297.

2. Bill title: To amend the Marine Protection, Research, and Sanctuaries Act of 1972 to authorize appropriations to carry out the provisions of such act for fiscal year 1978.

3. Bill status: As reported by the House Committee on Science and

 ${f Technology, May 19, 1977.}$

4. Bill purpose: The bill authorizes appropriation of \$11.8 million to carry out the purposes of the Marine Protection, Research, and Sanctuaries Act of 1972. This bill is authorizing legislation which requires subsequent appropriation action.

5. Budget impact:

Sec. 1—Ocean dumping (subfunction 304)

Fiscal year 1978:	Milliona
Authorization amount	\$4.8 4.1
Fiscal year 1979: Authorization amountCosts	0
Viscal year 1980: Authorization amount	0
" Authorization amount Costs Costs	0
Fiscal year 1982: Authorization amount Costs	0

Sec. 2—Comprehensive research on ocean dumping (subfunction 306)

Fiscal year 1978:	and the second s	Millione .
Authorization		\$6.5
Costs		4.7
Fiscal year 1979:	;	3.7
Authorization		0 >)
Costs		1.8
Fiscal year 1980 :		
Authorization		0
Costs		. 5
Fiscal year 1981:		,
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Fiscal year 1982:	•	
Authorization		0
Costs		0-
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•	Car D. If and a non-stranger (or blue stick 906)	11.7
	Sec. 3—Marine sanctuaries (subfunction 306)	
Fiscal year 1978:		Millione
Fiscal year 1978: Authorization		Millione \$0.5
Fiscal year 1978: Authorization Costs		Millione \$0.5
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6. Basis for estimate: The authorization amounts are those stated in the bill. For the purposes of this estimate, it is assumed that this legislation and the necessary appropriation action are enacted prior to fiscal year 1978. The outlay rates used in this estimate were determined after consultation with staff of the Environmental Protection Agency and the National Oceanic and Atmospheric Administration. The spendout rates of 85 percent in year 1 and 15 percent in year 2 used in section 1; 73 percent in year 1, 18 percent in year 2, and 9 percent in year 3 used in sections 2 and 3 are based on the historical experience of this program.

7. Estimate comparison: None.

8. Previous CBO estimate: The Congressional Budget Office previously estimated the costs of H.R. 4297 as introduced in the House on March 2, 1977. This estimate contains a \$0.5 million increase for ocean dumping for comprehensive monitoring due to action of the House Committee on Science and Technology.

9. Estimate prepared by: Terry Nelson.

10. Estimate approved by: James L. Blum, Assistant Director for Budget Analysis.

11. COST AND BUDGET DATA

Pursuant to clause 7 of rule XIII of the Rules of the House of Representatives, the committee incorporates and adopts the statement of the report of the Committee on Merchant Marine and Fisheries (H. Rept. 95-325) with respect to the cost and budget data.

12. Effect of Legislation on Inflation

Pursuant to clause 7 of rule XIII of the Rules of the House of Representatives, the committee incorporates and adopts the statement of the report of the Committee on Merchant Marine and Fisheries (H. Rept. 95-325) with respect to the effect of this legislation on inflation.

13. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

Pursuant to rule XIII, clause 3, of the Rules of the House of Representatives, changes in existing law as made by the bill, as reported, are as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman):

Section 1444 of title 33, United States Code (sec. 204 of Public

Law 92-532 as amended):

§ 1444. Authorization of appropriations

There are authorized to be appropriated for the first fiscal year after October 23, 1972, and for the next two fiscal years thereafter such sums as may be necessary to carry out this subchapter, but the sums appropriated for any such fiscal year may not exceed \$6,000,000. There are authorized to be appropriated not to exceed \$1,500,000 for the transition period (July 1 through September 30, 1976), [and] not to exceed \$5,600,000 for fiscal year 1977, and not to exceed \$6,500,000 for fiscal year 1978.